



**Texas Skyward User Group Conference**

# **Using the Auto Scheduler**

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# Future Scheduling-Using the Auto Scheduler



This session will discuss how to use the Auto Scheduler with Imperative, Pseudo, and Actual runs to schedule your students more effectively.

- Overview of the Auto Scheduler range screen
- Imperative vs. Pseudo vs. Actual
- Interpret the Scheduling Run Analysis screen
- Interpret the Student Conflict Detail Report

## Auto Scheduler Range Screen - Imperative

### Generate Student Schedules Maintenance

This Process will Allow the Mass Scheduling of Students into their Requested Courses based on the Ranges Entered by the User.

#### Template Settings

\* Template Description:

Share with other users in entity 001

#### Schedule Generation Options

Year To Generate Schedules For:       Terms:       Terms:

#### Student Ranges

<b>Start</b>	<b>End</b>
* Grade/Grad Yr: <input type="text" value="12"/> <input type="text" value="2018"/> <input type="text" value="09"/> <input type="text" value="2021"/>	
<b>Low</b>	<b>High</b>
* Student Type: <input type="text" value=""/>	<input type="text" value="ZZZ"/>
* CY Sched Team: <input type="text" value=""/>	<input type="text" value="ZZZ"/>

#### Scheduling Run To Perform

Actual Scheduling Run      \* Number of Runs:    
 Imperative Conflict Run  
 Pseudo Scheduling to Simulate Process

#### Auto Scheduler Type

.Net Scheduler

#### Scheduling Options

Process Special Ed Courses  
 Close Sections When Filled  
 Build Free Period Matrix  
     \* Semester Imbalance Max:    
 Use Maximum Special Ed Enrollment %  
 Force Co-Requisites to Schedule All or Nothing  
      Only for flagged Co-Requisites   
 Schedule Required Courses first, then Elective Courses

#### Creation Options

Create Student Conflict Detail  
 Include Imbalances As Conflicts

#### Balance By Student Attributes

##### Student Attributes

Select ▲	Order	Field
<input checked="" type="checkbox"/>	0	Gender
<input type="checkbox"/>	0	Race
<input type="checkbox"/>	0	Special Education

3 records displayed

## Auto Scheduler Range Screen - Pseudo

### Generate Student Schedules Maintenance

This Process will Allow the Mass Scheduling of Students into their Requested Courses based on the Ranges Entered by the User.

#### Template Settings

\* Template Description:   
 Share with other users in entity 001

Save

Save and Run

Back

#### Schedule Generation Options

Year To Generate Schedules For:

Terms:

Terms:

#### Student Ranges

\* Grade/Grad Yr:

\* Student Type:

\* CY Sched Team:

#### Scheduling Run To Perform

Actual Scheduling Run  
 Imperative Conflict Run  
 Pseudo Scheduling to Simulate Process

\* Number of Runs:

#### Auto Scheduler Type

.Net Scheduler

#### Scheduling Options

Process Special Ed Courses  
 Close Sections When Filled  
 Build Free Period Matrix  
 \* Semester Imbalance Max:    
 Use Maximum Special Ed Enrollment %  
 Force Co-Requisites to Schedule All or Nothing  
 Only for flagged Co-Requisites   
 Schedule Required Courses first, then Elective Courses

#### Creation Options

Create Student Conflict Detail  
 Include Imbalances As Conflicts

#### Balance By Student Attributes

##### Student Attributes

Select	Order	Field
<input checked="" type="checkbox"/>	0	Gender
<input type="checkbox"/>	0	Race
<input type="checkbox"/>	0	Special Education

3 records displayed

Asterisk (\*) denotes a required field

## Auto Scheduler Range Screen - Actual

### Generate Student Schedules Maintenance

This Process will Allow the Mass Scheduling of Students into their Requested Courses based on the Ranges Entered by the User.

#### Template Settings

\* Template Description:   
 Share with other users in entity 001

Save  
 Save and Run  
 Back

#### Schedule Generation Options

Year To Generate Schedules For:

Terms:  Terms:

#### Student Ranges

**Start**      **End**  
 \* Grade/Grad Yr:      
  
**Low**      **High**  
 \* Student Type:   
 \* CY Sched Team:

#### Scheduling Run To Perform

Actual Scheduling Run      \* Number of Runs:    
 Imperative Conflict Run  
 Pseudo Scheduling to Simulate Process

#### Auto Scheduler Type

.Net Scheduler

#### Scheduling Options

Process Special Ed Courses  
 Close Sections When Filled  
 Build Free Period Matrix  
     \* Semester Imbalance Max:  
 Use Maximum Special Ed Enrollment %  
 Force Co-Requisites to Schedule All or Nothing  
      Only for flagged Co-Requisites 
 Schedule Required Courses first, then Elective Courses

#### Balance By Student Attributes

##### Student Attributes

Select	Order	Field
<input checked="" type="checkbox"/>	0	Gender
<input type="checkbox"/>	0	Race
<input type="checkbox"/>	0	Special Education

3 records displayed

#### Creation Options

Create Student Conflict Detail  
 Include Imbalances As Conflicts

Asterisk (\*) denotes a required field

## Scheduling Run Analysis Screen

### Student Scheduling Run Analysis

Available Auto Scheduling Run Records for the 2017-18 School Year

Term	Run Type	Start Date	Start Time	End Date	End Time	Str Grd	End Grd	Student Conflict Percent	User Name	Sche Type
YR (01-06)	Actual	08/31/2017	10:35 AM	08/31/2017	10:35 AM	12	09	7% (9/129)	Polite, Cinthia	.Net

Expand All Collapse All Modify Details (displaying 3 of 3) View Printable Details

▼ Run Details Student Conflict Detail Report Course Conflict Report Conflict Totals Report

Highest Period: 08 Build Free Matrix: Yes Start Graduation Year: 2018 End Graduation Year: 2021  
 Close Sections When Filled: Yes Create Conflict Detail: Yes Include Imbalances as Conflicts: No Encountered Error: No  
 Process Special Ed Courses: No

▼ Totals

Grade	Total Students	Conflicts	Conflict Percent	Imbalances	Imbalance Percent
09	5	0	0.0%	0	0.0%
10	107	8	7.5%	0	0.0%
11	7	1	14.3%	0	0.0%
12	10	0	0.0%	0	0.0%
<b>Totals</b>	<b>129</b>	<b>9</b>	<b>7%</b>	<b>0</b>	<b>0.0%</b>

▼ Free Period Matrix

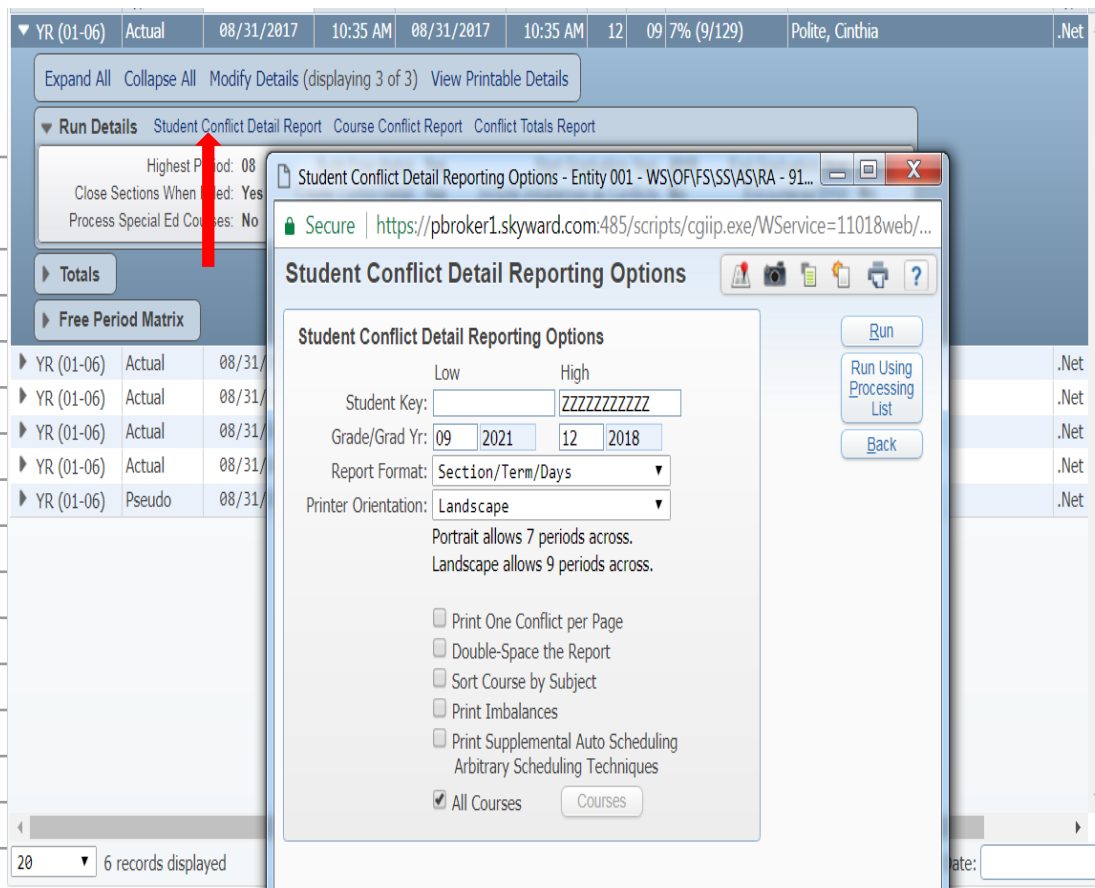
Grade: 12

DAY TERM: 1 GRADE: 12 STUDENTS: 10

DAY	TERM: 1	GRADE: 12	STUDENTS: 10							
	--0--	--1--	--2--	--3--	--4--	--5--	--6--	--7--	--8--	--9--
MON	5	8	7	9	8	7	7	9		
TUE	5	8	7	9	8	7	7	9		
WED	5	8	7	9	8	7	7	9		
THU	5	8	7	9	8	7	7	9		
FRI	5	8	7	9	8	7	7	9		

20 6 records displayed Start Date:

## Student Conflict Detail Report – Shows the conflicts for each student



The screenshot shows the Skyward application interface. In the background, the 'Run Details' section is visible with a red arrow pointing to the 'Student Conflict Detail Report' link. The foreground shows the 'Student Conflict Detail Reporting Options' dialog box with the following settings:

- Student Key: [ ] High [ ZZZZZZZZZZ ]
- Grade/Grad Yr: [ 09 | 2021 ] [ 12 | 2018 ]
- Report Format: [ Section/Term/Days ]
- Printer Orientation: [ Landscape ]
- Portrait allows 7 periods across. Landscape allows 9 periods across.
- Print One Conflict per Page
- Double-Space the Report
- Sort Course by Subject
- Print Imbalances
- Print Supplemental Auto Scheduling Arbitrary Scheduling Techniques
- All Courses [ Courses ]

Buttons on the right side of the dialog include 'Run', 'Run Using Processing List', and 'Back'. The background application window shows a table with the following data:

YR (01-06)	Actual	08/31/
▶ YR (01-06)	Actual	08/31/
▶ YR (01-06)	Actual	08/31/
▶ YR (01-06)	Actual	08/31/
▶ YR (01-06)	Actual	08/31/
▶ YR (01-06)	Pseudo	08/31/

At the bottom of the background window, it indicates '20 6 records displayed'.







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**THANK YOU FOR ATTENDING!**

